

# *Turcizyras assingi*, a New Genus and Species of the Tribe Lomechusini (Staphylinidae, Aleocharinae) from Turkey

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**Abstract** *Turcizyras assingi* gen. et sp. nov. (tribe Lomechusini, subtribe Myrmeconiina) is described based on a female specimen collected from Adiyaman, Turkey. This genus is closely similar in general appearance to the genus *Pella*, but is clearly distinguished from it by having some plesiomorphic states in the labium, i.e., ligula with four setae, 1st segment of palpus much longer and wider than 2nd, and apodeme with a medial projection. The systematic position remains uncertain.

**Key words:** Lomechusini, Myrmeconiina, labium, *Pella*, *Zyras*.

In the course of a systematic study on the myrmecophilous genus *Pella* Stephens, 1835 (Maruyama, 2006), Dr. Volker Assing sent me interesting material of the genus collected in the Western Palearctic region. Amongst this, one specimen collected by him in Turkey was quite unknown to me, and it seemed to be a new species of *Pella* at the first glance, indeed it was labelled “*Pella* sp. n.” by Dr. Assing. However, after a careful examination of the mouthparts, it was found not to be a member of *Pella* even though its facies is closely similar to that of *Pella* species. After thorough study it cannot be affiliated to any known genus of the tribe Lomechusini, therefore it is described here as a new genus and species.

The lomechusine fauna of the Western Palearctic region is well studied compared to other aleocharines, probably due to their often striking appearance and large body size, and the latest genus of the tribe was described in 1988, 18 years ago (*Anopsapterus* Lecoq, 1988). Therefore, the present finding was quite unexpected and remarkable.

Terminology and technical procedures adopted herein generally follow Maruyama (2006).

## *Turcizyras* gen. nov.

Type species: *Turcizyras assingi* sp. nov.

*Etymology.* Combination *Turcia*, the Latin name of Turkey, and *Zyras*, name of a related genus. Gender masculine.

*Diagnosis and comments.* This genus can be distinguished from the other genera of the Myrmeconiina by a combination of the following character states: 1) body small, about 3.8 mm in length; 2) head slightly pentangular in dorsal view; 3) head without “neck”; 4) head with occipital suture; 5) eyes small, 0.28 times as long as head width; 6) antenna generalised, but slightly depressed; 7) 11th segment of antennae long, longer than 1st segment; 8) pronotum and elytra densely covered with setae; 9) pronotal and elytral surfaces smooth; 10) hind wings reduced; 11) paratergite generalised, without projection; 12) 10th tergite densely covered with setae except for mesal area.

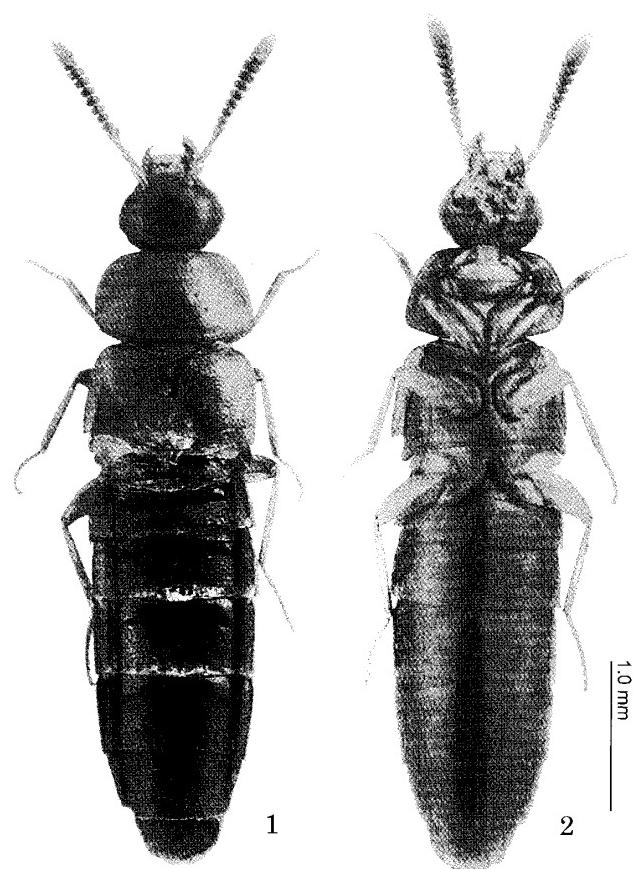
This genus is closely similar in general appearance to *Pella* but distinguished from it by the following character states: 1) ligula with four setae; 2) 1st segment of labial palpus much longer and wider than 2nd; 3) apodeme of labium with a medial projection. In the Myrmeconiina, these states of the labium are considered to be plesiomorphic and observed in some basal lineages,

e.g., *Zyras* (s. str.), *Drusilla* and *Tetrabothrus* and several other tribes of the Aleocharinae, e.g., the Athetini and Falagriini. However, the systematic position of this genus remains uncertain, and any close relative has not been detected during my examination of many lomechusine lineages. The precise systematic position should be ascertained when thorough phylogenetic analysis of the whole Lomechusini is undertaken.

**Description.** Body (Fig. 1): Small, somewhat robust, subparallel-sided.

Head: Head capsule (Figs. 1–3) slightly pentangular. Occipital suture present, dorsally crossing hind part of head, continuing onto ventral side, and terminating on each side near posterior articulation of hypostoma; surface covered with setae. Eyes (Figs. 1, 3) oval in lateral view, slightly prominent, 0.28 times as long as head width; small setae present among facets. Antennae (Figs. 1, 2, 4) generalised in shape, almost as long as pronotal width, more or less flattened dorso-ventrally; 11th segment longer than 1st; setae on surface becoming denser and smaller apicad; 4th to 10th segments slightly dilated apicad, well margined apically and basally; each segment with erect black setae, those on 3rd to 10th segments forming a row around apical rim; 11th segment oval.

Mouthparts: Labrum much wider than long, submembranous anteriorly. Mandibles somewhat asymmetric; right mandible with a small tooth at middle of inner margin. Maxilla: cardo generalised, almost elliptical in ventral view, with about ten pseudopores ventrally. Stipes small, triangular, with two setae at base, with a pseudopore. Palpifer triangular in lateral view, with a long seta and two small setae. Lacinia with about five pseudopores and six setae; apical inner margin with a row of setae forming a comb; surface around comb densely pubescent; subgalea small, much smaller than last segment of maxillary palpus; galea long and narrowed; slightly curved at middle, with some pores near apex, densely pubescent apically. Maxillary palpus sparsely with pseudopores; 1st segment very small, with one seta; 2nd segment gently curved, and much dilat-



Figs. 1, 2. *Turcizyras assingi*, habitus; 1, dorsal view; 2, ventral view.

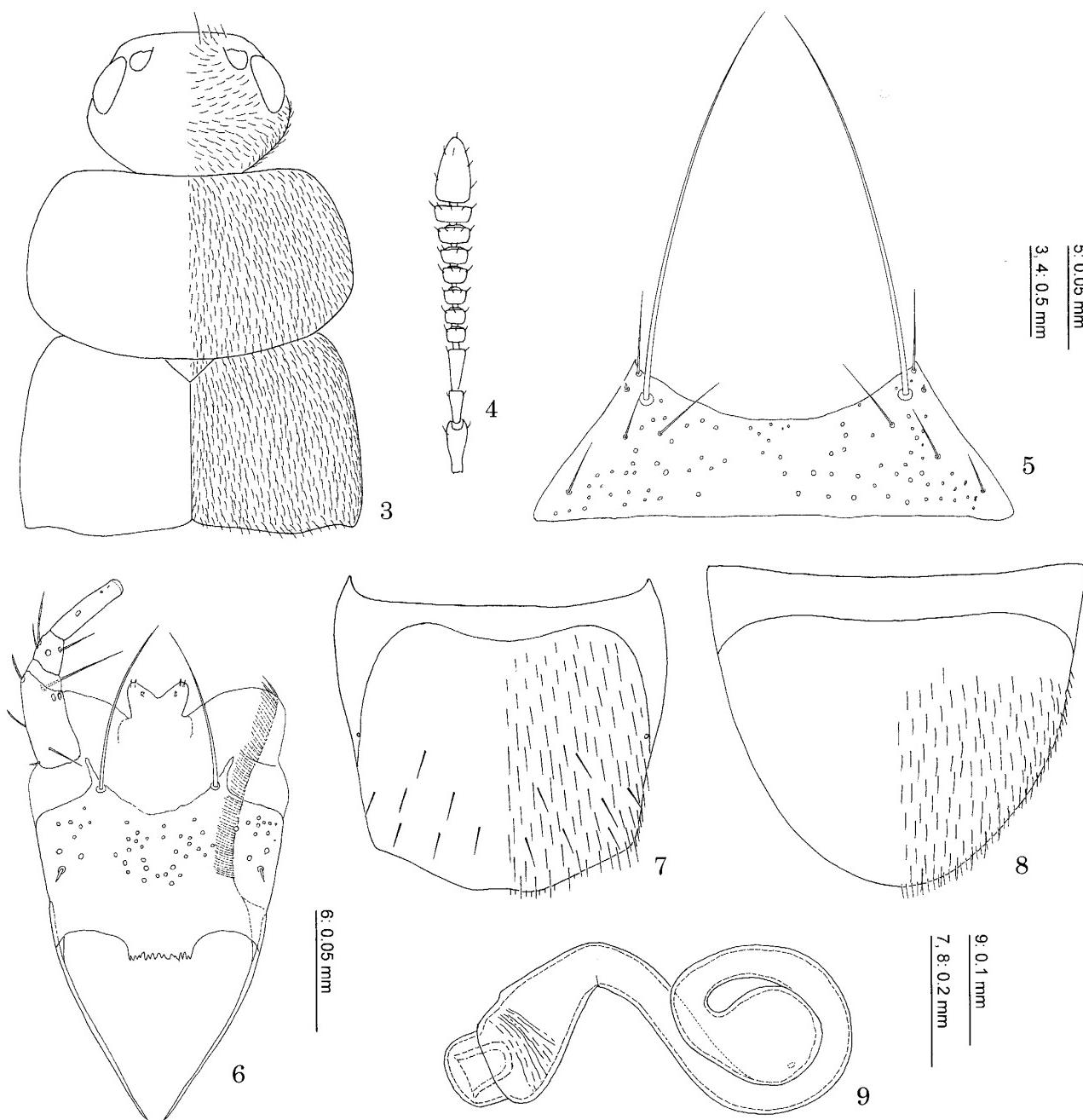
ed apically; 3rd segment the longest, slightly longer than 2nd, almost straight; 4th small, conical. Mentum (Fig. 5) trapeziform; anterior margin deeply and largely emarginate; posterior margin truncate; around antero-lateral corner with a long seta; surface moderately covered with pseudopores, with one small setae antero-laterally and four long setae. Labium (Fig. 6): prementum with two real pores and one setal pore mesolaterally, and about 30 pseudopores, which are relatively large and poorly differentiated from real pores; internal ridge very small, its length less than 1/8 that of prementum; apodeme with a medial projection; lateral lobe of apodeme gently curved, pointed apically; ligula bilobed and each lobe rounded apically; four setae present; palpus with 1st segment generalized and much longer and broader than 2nd; 2nd segment not notched from base to apex; hypopharynx (Fig. 6) without apical seta; medial sensory field with small ridges around apex and scale-like sculptures near

base.

Thorax: Pronotum (Figs. 1–3) elliptical, much wider than long; disc well margined, somewhat convex; surface densely covered with setae uniformly. Scutellum (Fig. 8A) generalised but somewhat large, its apex somewhat angled. Mesosternum (Fig. 2) with process short, slightly projected posteriad, and rounded at apex. Metasternum (Fig. 2) twice longer than metasternum; process well developed, narrowed apicad,

its apex somewhat rounded. Elytra (Figs. 1, 3) short, without epiplural suture, more or less margined from shoulder through inner margin to posterior margin; surface almost uniformly covered with setae. Hind wing reduced and about twice as long as elytra.

Abdomen: Second segment (Fig. 1): tergite with posterior margin weakly emarginate, its postero-lateral corner rounded. Third to 6th segments (Fig. 1): tergites with posterior margins al-



Figs. 3–9. *Turcizyras assingi*, body parts; 1, forebody, dorsal view; 4, right antenna, ventral view; 5, mentum, ventral view; 6, labium, ventral view; 7, 8th tergite, dorsal view; 8, 8th sternite, ventral view; 9, spermatheca.

most straight; dorsolateral plates rectangular except those of 6th segment evidently narrowed posteriad; sternite with surface moderately covered with setae. Seventh segment (Fig. 1): tergite with a pair of gland openings at base; lateral plates fused, narrowed posteriad, pointed at apex. Eighth abdominal segment (Figs. 7, 8): tergite with basal suture situated near base, curved laterally and continuing apicad; sternite with basal suture reaching lateral sides. Ninth abdominal segment: tergite with surface densely covered with setae. Tenth abdominal segment with surface densely covered with setae except in mesal area; setae becoming sparser and longer apicad.

### *Turcizyras assingi* sp. nov.

**Etymology.** Dedicated to Mr. Volker Assing, collector of the holotype.

**Type material.** Holotype, ♀, "TR—Adiyaman [19], 50 km NE Adiyaman, SW Sincik, 1280 m 38°01'16N, 38°35'54E 23.III.2005, V. Assing sp. n. det. V. Assing 2005/HOLOTYPE *Turcizyras assingi* det. Maruyama, 2006". In the private collection of V. Assing (Hannover, Germany).

**Type locality.** Adiyaman, Turkey.

**Distribution.** Turkey.

**Diagnosis.** *Turcizyras assingi* is very similar in general appearance to the species of the genus *Pella*, especially those of the *laticollis* group and the Central Asian species of the *excepta* group, but may be easily distinguished from them by the smaller body, the colour, the longer 11th antennal segment, and the reduced hindwing. See also the diagnosis of *Turcizyras* mentioned above.

**Description.** Body slender. Reddish brown in ground colour; antennae, mouthparts, pronotum, elytra, legs, and around posterior margins of 3rd to 6th abdominal segments reddish orange. Head (Fig. 1) widest behind eyes; surface finely reticulate, densely covered with setae; setae shorter than those on pronotum and elytra; length of eyes 0.28 times as long as head width. Antennae (Fig. 4) much shorter than head, pronotum and elytra combined, as long as pronotal width; 1st segment much shorter than 2nd and 3rd combined; 2nd segment slightly shorter than 3rd; 3rd segment about as long as 1st; 4th to 10th segments wider than long; 11th conical, segment longer than 1st; approximate relative lengths of segments from basal to apical: 11 : 7.5 : 10 : 3.0 : 3.0 : 3.0 : 3.0 : 3.5 : 3.5 : 15. Pronotum (Figs. 1, 3) elliptical, 1.7 times as wide as long, widest around middle;

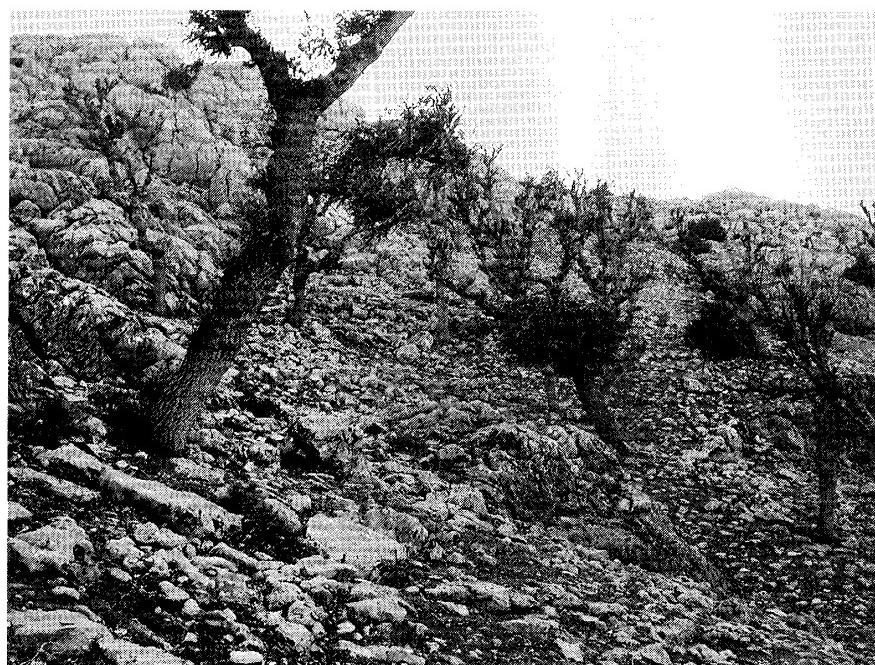


Fig. 10. Type locality of *Turcizyras assingi*. After Assing (2005).

posterior margin rounded; surface smooth, densely covered with setae, with two or three macrosetae along lateral margin, which are very small and poorly differentiated from setae. Scutellum with surface smooth, moderately covered with setae. Elytra (Figs. 1, 3) slightly widened apicad; surface smooth, densely covered with setae, with five or six macrosetae laterally, which are very small and poorly differentiated from setae. Hind wing twice as long as elytra. Legs short; hind tibia almost as long as elytra. Abdomen subparallel-sided, somewhat wider than elytra, widest around 4th and 5th segments; surface smooth; 3rd to 7th tergites moderately covered with setae and with a row of long setae along posterior margins; 8th tergite (Figs. 7) with eight macrosetae; 9th tergite with four macrosetae; 10th tergite with posterior margin slightly rounded, with four macrosetae.

Male unknown.

Female: Eighth tergite (Fig. 7) with posterior margin slightly emarginate medially; 8th sternite (Fig. 8) without distinct macrosetae; sensory setae of 8th sternite generalised, almost the same in shape as other setae. Spermatheca (Fig. 9) with basal part coiled 1.5 times, bulbous around base; apical part dilated apicad, constricted near apex, its inner wall sparsely wrinkled from apex to around apical half.

*Measurements (in millimetres).* Body length, ca. 3.8; fore body length (from apex of clypeus to

apices of elytra), ca. 1.5; head length, 0.438; head width, 0.588; eye length, 0.163; antennal length, 0.975; pronotal length, 0.519; pronotal width, 0.881; elytral length, 0.513; elytral width, 0.925; hind tibial length, 0.529.

*Bionomics.* The specimen was sifted out from litter of oak (*Quercus* sp.) and shrubs on a rather dry and rocky north slope (Fig. 10) (Assing, pers. comm.).

### Acknowledgments

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### References

- Assing, V., 2005. New species and new records of Eastern Mediterranean *Geostiba* Thomson (Coleoptera: Staphylinidae, Aleocharinae). *Linzer biol. Beitr.*, **37**: 1047–1070.
- Lecoq, J.-C., 1988. Un nouveau coléoptère cavernicole du Sahara algérien: *Anopsapterus* n. gen. *bordati* n. sp. (Coleoptera, Staphylinidae). *L'Entomologiste*, **44**: 319–322.
- Maruyama, M., 2006. Revision of the Palearctic species of the myrmecophilous genus *Pella* (Coleoptera, Staphylinidae, Aleocharinae). *Nat. Sci. Mus. Monogr.*, (32): 1–207.